

ABSTRACT

The aim of the invention is to provide a device for duplicating and characterizing nucleic acids almost simultaneously and with a high sample throughput rate. The device consists of a chamber body with a recess whose edge sealingly holds an optically transparent chip. Said chip holds nucleic acids in individual spots on a detection surface. The chamber body is placed on an optically transparent chamber support with a bearing surface, in such a way that a capillary gap, which can be filled with a liquid sample, is formed between the detection surface of the chip facing towards the chamber support and said chamber support. The chamber body is provided with an inlet and an outlet, which are spatially separate from each other, and has a space, which laterally encompasses the chip and which has a gas reservoir. The chamber support is provided with heating elements.